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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,824	07/12/2001	Horatio Lo	M-8325-1P US	7988

33031 7590 01/14/2004

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AUSTIN, TX 78759

EXAMINER

SHIN, CHRISTOPHER B

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 01/14/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/904,824

Applicant(s)

LO ET AL.

Examin r

Christopher B Shin

Art Unit

2182

-- The MAILING DATE of this c mmunicati n appears on the cover sheet with the c rresp ndence address --  
Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-85 is/are pending in the application.
- 4a) Of the above claim(s) 2-85 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The amendment received October 14, 2003 has been entered and carefully considered. Claim 1 has been amended and claims 2-85 have been newly added, which raises new subject matters are that not originally presented; therefore, are withdrawn from consideration.

In claim 1, line 4, examiner notes that the word “routers” should have bee “routers”, i.e., the underline wasn’t necessary because the original claim 1 already had “routers”.

### ***Response to Arguments***

2. Applicant's arguments filed October 14, 2003 have been fully considered but they are not persuasive.

a. In response to the arguments on pages 16-19, the examiner modifies for better explanation of the art rejection without changing the Art rejection (35 USC 102e) as follows. More specifically, the examiner’s interpretations of the “storage router” is a router that is connected to I/Os, peripherals or storage as taught by the Horst reference.

### ***Original Presentation***

3. Newly submitted claims 2-85 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

i. Claim groups 2-25 are directed to storage network interface multiport controllers; group 26-47 are directed to storage interface devices; and group 48-85 are directed to a storage virtualization engine. The all of the groups include limitations that were not originally presented that will require additional search and consideration.

ii. The Examiner suggest the applicant to separate the above groups into three additional/ independent inventions.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 2-85 are withdrawn from consideration as being directed to a non-elected invention. See 37 C.F.R. § 1.142(b) and M.P.E.P. § 821.03.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Horst et al. (6,233,702).

a. Examiner notes that the entire teachings of Horst reference is relied upon, though not all section of the Horst reference has been explicitly discussed, for the follow rejection.

b. In figure 1B, Host teaches all of the claimed limitations as follows:

- | <u>Claim 1</u>  | <u>Horst Reference</u>   |
|---|--|
| - distributed storage management platform architecture comprising   | - feature of figure 1B   |
| - a plurality of storage routers  | - feature of 14B, connected to 16A-I/O, of figure 1B, See also columns 4-5, lines 68-1, see also column 2, line 33 (disk storage), column 22, line 58 (storage controllers); examiner interprets the above teachings with router(s) connected to peripherals such as storage, which is functionally equivalent to the broadly claimed "storage router" |
| - each one of said storage routers comprises a plurality of interface controllers   | - feature of ports (0,1,2,3,4,5) of each router (14B), see also figure 2, in connection with figure 1B & 1C  |
| - one of said interface controllers of each one of said storage routers is communicatively coupled to a one of said interface controllers of at least one other of said storage routers |  |

- feature of LA, L' of figure 1B

c. For the above reasons, the claim 1 is clearly anticipated by the teachings of the Horst reference.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. **Any Response To This Action Should Be Mailed To:**

**If The Action Is Non-Final**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**or faxed to:**

(703) 892-9306, (for formal communications intended for entry)

**If The action is Final**

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Alexandria, VA 22313-1450

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(703) 892-9306, (for formal communications; please mark "EXPEDITED PROCEDURE")

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**Hand-delivered responses should be brought to**  
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Crystal Plaza Two, Lobby, Room 1B03  
Arlington, VA 22202

**Any Other Telephone Communication Should Be Directed To**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Shin whose telephone number is (703) 305-9658. The examiner can normally be reached on Monday - Thursday from 7:00 AM to 4:00 PM.

Christopher B. Shin  
January 9, 2004

*Christopher B. Shin*

**PRIMARY EXAMINER**  
**ART UNIT 2182**

